How to check your medications for interactions and intolerances

There are 4 ways in which medications can be problematic:

- 1) Side effects from the active ingredient
- 2) Interactions among medications
- 3) Interactions among medications, supplements and foods
- 4) Side effects from inactive ingredients (excipients)

This handout explains how you can look up some information yourself. Your pharmacist or medical provider can also help you with items 1-3 above. You might want to schedule a consultation meeting with your pharmacist, or an appointment with your medical provider to specifically discuss medications. Sensitivity to inactive ingredients (item 4, above) can be due to Mast Cell Activation Syndrome (MCAS), and not all providers are knowledgeable about MCAS sensitivity to excipients in medications. So, it can help for you to follow the guidelines below to identify chemicals to which you are sensitive. You should ultimately discuss medication concerns with your primary medical provider. Once you identify excipients you are sensitive to, your pharmacist might be able to check new medications for you.

https://www.drugs.com

Items 1-3: Drugs.com is an excellent website for finding out what side effects and interactions your medications might have. You may need to create an account to enter more than 4 medications or to save your list. Click on Interactions Checker and enter your medications. The program will tell you if there are interactions, and if those interactions are 'major', 'moderate' or 'minor', as well as whether you have duplication that might be a concern, and whether there are foods that impact your medications. If you have concerns, contact your primary medical provider to discuss whether the benefits outweigh the risks for you, or whether some modification to your medications might be appropriate. It is generally not safe to change your prescription medications without your medical provider's guidance, so don't just stop medications without your provider's recommendation.

https://dailymed.nlm.nih.gov

Item 4: The Dailymed website provides information about 'excipients' or inactive ingredients that might trigger MCAS. You need the exact formulation that you are taking, as different brands or generics may have different excipients. The best way is to use the NDC code on the medication bottle, as that specifies the exact pill you have. If this number is not on the bottle, your pharmacy can tell you what it is. Click on the "If you are a consumer, please visit this version". The Dailymed website has so much information it can be overwhelming. Don't panic – you don't need to understand everything to find the info you need for this purpose. Scroll down to and click on "INGREDIENTS AND APPEARANCE" and scroll down to INACTIVE INGREDIENTS. Look for the following likely culprits, in bold, below.

Drs. Schofield and Afrin (2019) published a very helpful article explaining and giving examples. Some of their key points:

- a. FD&C dyes are very common triggers in MCAS patients: In the authors' experience, red dyes seem to be the most poorly tolerated, followed closely by yellow and then blue.
- b. Not all colored pills contain FD&C dyes. Some contain ferric oxide red or yellow which tend to be well tolerated by most MCAS patients.
- c. Alcohols are also common triggers in MCAS patients, e.g. benzyl alcohol, polyvinyl alcohol. When considering the possibility of excipient reactivity in MCAS patients, dyes and alcohols are good places to start.
- d. Some excipients may cause immediate reactions, while others might cause problems over time.
- e. Different strengths/dosages of medications produced by the same manufacturer may have different excipients, especially dyes, so that a patient may distinguish between different strengths of the medication more easily, e.g. the 10mg pill might have different excipients than the 20mg pill, so you might be fine with two 10mg pills but not one 20mg pill.
- f. Multidose medication vials (e.g., nasal sprays, eyedrops) must contain a preservative, and many MCAS patients react to these preservatives.
- g. It is also important to avoid culprit excipients in foods as well as personal care and cleaning products in patients who are reactive, e.g., shampoos and toothpastes may contain dyes.
- h. It is helpful for MCAS patients to make a spreadsheet of the excipients from medication and supplement
- i. products they know they tolerate versus products they know they do not tolerate. Because there are multiple excipients in most medications and supplements, using clues from tolerated and not-tolerated agents can help determine culprit excipient or excipients.

Schofield JR, Afrin LB. 2019. Recognition and Management of Medication Excipient Reactivity in Patients With Mast Cell Activation Syndrome. *Am J Med Sci.* 357(6):507-511. 10.1016/j.amjms.2019.03.005